

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



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Applicant's or agent's file reference PIA40206BIO	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/KR2004/000841	International filing date(day/month/year) 12 APRIL 2004 (12.04.2004)	Priority date (day/month/year) 11 APRIL 2003 (11.04.2003)
International Patent Classification (IPC) or national classification and IPC IPC7 B60H 3/00		
Applicant BIOTEL CO., LTD. et al		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box relating to Sequence Listing (see Section 802 of the Administrative Instructions).
- This report contains indications relating to the following items:
 - ☒ Box No. I Basis of the report
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 11 NOVEMBER 2004 (11.11.2004)	Date of completion of this report 18 JULY 2005 (18.07.2005)
Name and mailing address of the IPEA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140	Authorized officer LEE, Jin Uk Telephone No. 82-42-481-5514 

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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished

- ☐ the description:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____

- ☐ the claims:
- pages _____ as originally filed/furnished
- pages* _____ as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____

- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____

- ☐ the sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	1-22	YES
	Claims		NO
Inventive step (IS)	Claims	8-12, 15-22	YES
	Claims	1-7, 13, 14	NO
Industrial applicability (IA)	Claims	1-22	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1: KR 20-300243 Y1 (24 Dec. 2002)

D2: KR 96-24114 A (20 July 1996)

D3: JP 11-512989 A (09 Nov. 1999)

1. Novelty and Industrial Applicability

Claims 1-22 meet the criteria for novelty and industrial applicability set out in PCT Article 33(2) and (4).

2. Inventive Step

1. The condensate removal unit comprising an inlet, an outlet, and a drain port, as set forth in claim 1 of the present application, corresponds to the condensate water trap comprising an inlet pipe, an outlet pipe and a condensate water discharge pipe, as shown in Fig. 14 of D1. Therefore, it would be obvious to a person skilled in the art to derive the technical features of claim 1 from those of D1, thereby arriving at the invention claimed in claim 1.

2. The funnel-shaped condensate removal unit, as set forth in claim 2 of the present application, is the same as illustrated in Fig. 14 of D1. The valve for closing, as set forth in claim 3 of the present application, corresponds to the condensate water discharge valve of D1. The valve which is selectively opened, as set forth in claim 4, is obvious to a person skilled in the art. The controller and the controller panel, as set forth in claims 5 and 6, correspond to the controller and the controller panel of D1. Claim 7 is characterized by the condensate removal unit arranged near the oxygen discharge nozzle, and claim 13 is characterized by the transfer line of 1m or longer. Said technical features of claims 7 and 13 can be obtained merely by a design change or a numerical limitation which can be readily made according to the characteristics of the concerned apparatus.

(Continued on Supplemental Sheet.)

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box V.

Therefore, it would be obvious to a person skilled in the art to derive the technical features of claims 2-7 and 13 from the teaching of D1, thereby arriving at the invention claimed in said claims.

3. The first housing and the second housing as set forth in claim 14 correspond to the condensate water trap and the sterilizer of D1 which are connected to each other. Therefore, it would be obvious to a person skilled in the art to derive the technical features of claim 14 from the teaching of D1, thereby arriving at the invention claimed in claim 14.

4. However, the technical features disclosed in claims 8-12 and 15-22 are not disclosed in D1; nor are they obvious to a person skilled in the art.

5. D2 relates to a vapor-liquid separator of a freezing machine. D3 relates to a ventilator for a vehicle. The subject matters of said documents are different from the condensate removal unit as set forth in claims 1 and 14 of the present application.

6. In conclusion, the apparatus for supplying an oxygen-rich gas claimed in claims 1-7, 13 and 14 can be readily invented by a person skilled in the art, and the apparatus for supplying an oxygen-rich gas claimed in claims 8-12, 15-22 cannot be readily invented by a person skilled in the art.